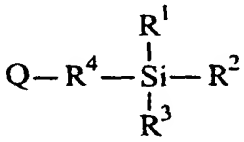
What is claimed is:

1. A process for treating particles to render them hydrophobic, the process comprising the steps of:

(i) contacting the particles with a compound of Formula I:



(I)

in which:

at least one of R^1, R^2 and R^3 is hydroxyl or a group hydrolysable at the Si-R bond;

R^4 is a divalent group that is resistant to hydrolysis at the Si-R^4 bond;

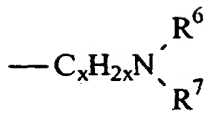
Q is H_2N- , -H_2N·HA or X-, wherein: HA is an mineral acid or an organic acid, and X is an anion; and

(ii) if Q is a salt moiety -NH_2·HA, then generating the free base of the amine moiety by adding a stoichiometric amount of strong base so as to react substantially completely with the acidic HA moiety;

(iii) contacting the particles with a substantially equimolar amount in relation to that of a compound of Formula I of:

(A) a compound of formula R^5-X if Q is H_2N- or -NH_2·HA in Formula I, wherein R^5 is selected from: a C_{8-40} alkyl; a C_{8-40} mono-, C_{8-40} di- or C_{8-40} tri-unsaturated alkenyl group; a C_{2-30} alkyl-substituted C_6-C_{40} aromatic group; a C_{2-30} mono-, C_{3-30} di- or C_{4-30} tri-unsaturated alkenyl-substituted C_6-C_{40} aromatic group provided further there is no double bond in the position alpha to the nitrogen atom unless the alpha carbon is part of an aromatic ring whereby it is permitted, and provided that there is no branching at the carbon atom bound directly to N; or

(B) a compound of formula R^*-NH_2 if Q is X- in Formula I, wherein R^* is selected from the group comprising R^5 or a group of the formula



in which x is either:

(a) an integer from 8 to 30, and R^6 and R^7 may be the same or different and are selected from: C_1-C_{30} alkyl; C_2-C_{30} alkenyl; C_6-C_{30} aromatic; C_7-C_{30} alkyl substituted aromatic; or C_8-C_{30} aryl-alkenyl, provided there is no double bond in the position alpha to the nitrogen atom, unless the alpha carbon is part of an aromatic ring whereby it is permitted and provided there is no branching at the carbon connected directly to N; one of either R^6 and R^7 but not both may also be hydrogen, or

(b) an integer from 1 to 7 and one of R^6 or R^7 is H and the other is selected from from: C_1-C_{30} alkyl; C_2-C_{30} alkenyl; C_6-C_{30} aromatic; C_7-C_{30} alkyl substituted aromatic; or C_8-C_{30} aryl-alkenyl, provided there is no double bond in the position alpha to the nitrogen atom, unless the alpha carbon is part of an aromatic ring whereby it is permitted and provided there is no branching at the carbon connected directly to N; or if neither R^6 and R^7 is hydrogen, then R^6 and R^7 may be the same or different and at least one of R^8 or R^9 must be a C_8-C_{30} alkyl, C_8-C_{30} alkenyl, C_8-C_{30} aromatic, or C_7-C_{30} alkyl substituted aromatic, or C_8-C_{30} aryl-alkenyl, provided there is no double bond in the position alpha to the nitrogen atom, unless the alpha carbon is part of an aromatic ring whereby it is permitted and provided there is no branching at the carbon connected directly to N, and the other may be C_1-C_{30} alkyl, C_2-C_{30} alkenyl, C_6-C_{30} aromatic, or C_7-C_{30} alkyl substituted aromatic, or C_8-C_{30} aryl-alkenyl, again provided there is no double bond in the position alpha to the nitrogen atom unless the alpha carbon is part of an aromatic ring whereby it is permitted and further that there is no branching at the carbon bonded directly to N.

2. The process defined in claim 1, wherein each of R^1, R^2 and R^3 is hydroxyl or a hydrolysable group.

3. The process defined in any one of claims 1-2, wherein the hydrolysable group has the formula OC_pH_{2p+1}, where p has a value from 1 to 10.

4. The process defined in any one of claims 1-3, wherein divalent group R^4 has the formula:

$$-(CH_2)_p(O)_o(C_6H_4)_n(CH_2)_m(CH=CH)_k-$$

in which k, m, n, o and p are all whole numbers and the order of the moieties is not restricted other than neither N nor O is directly bound to Si in the compound of Formula I.

5. The process defined in any one of claims 1-4, wherein R^5 is a C_{8-20} monounsaturated alkenyl or alkyl group.

6. The process defined in any one of claims 1-4, wherein R^5 a C_{16-18} monounsaturated alkenyl or alkyl group.

7. The process defined in any one of claims 1-6, wherein R^6 is hydrogen.

8. The process defined in any one of claims 1-7, wherein R^6 is hydrogen and R^6 is an alkenyl group selected from the group consisting of soya alkyl, tall oil alkyl, stearyl, tallow alkyl, dihydrogenated tallow alkyl, cocoalkyl, rosin alkyl, palmityl and derivatives of these which include one or more unsaturations.

9. The process defined in any one of claims 1-8, wherein X is selected from the group consisting of acetate, chlorine, bromine, iodine and sulphate.

10. The process defined in any one of claims 1-9, the particles comprise inorganic water insoluble compounds.

11. The process defined in any one of claims 1-9, wherein the particles are selected from the group consisting of titanium oxide, ferric oxide, hydrated ferric oxide, ferrous oxide, antimony oxide, barium carbonate, zinc oxide, zinc borate, lead oxide, dibasic lead phosphite, lead silicate, tribasic lead sulfate and mixtures thereof.

12. The process defined in any one of claims 1-9, wherein the particles comprise silica.

13. The process defined in any one of claims 1-12, comprising the further step of:

admixing the treated particles with a polymer solution and forming the mixture into a polymer dispersion.

14. The process defined in any one of claims 1-12, comprising the further step of:

admixing a slurry of treated particles with a polymer solution and forming the mixture into a polymer dispersion.

15. The process defined in any one of claims 13-14, wherein the polymer solution comprises a polymer and a solvent.

16. The process defined in claim 15, wherein the polymer is selected from the group consisting of an elastomer, a graft polymer or block polymer of monomers having at least one ethylenically unsaturated bond and polymerizable through this unsaturation, a plastic and mixtures thereof.

17. The process defined in claim 16, wherein the elastomer is selected from the group consisting of natural rubber (NR), cis-1,4-polyisoprene rubber

(IR), polybutadiene rubber (BR), styrene-butadiene rubber (SBR), acrylonitrile-butadiene rubber (NBR), hydrogenated acrylonitrile-butadiene rubber (HNBR), butyl rubber (IIR), halogenated butyl rubber (HIIR), ethylene-propylene monomer (EPM) rubber, ethylene-propylene-diene monomer (EPDM) rubber, chloroprene rubber (CR), ethylene-vinyl acetate (EVM) rubber, silicone rubber (Q), epichlorohydrin (ECO) rubber, urethane rubber (AU EU) and mixtures thereof.

18. The process defined in claim 16, wherein the plastic is selected from the group consisting of polystyrene, polyethylene, polypropylene, chlorinated polyethylene, acrylonitrile-butadiene-styrene (ABS) polymers, ethylene-vinyl-acetate (EVA) plastic, polyvinyl chloride (PVC), plasticized polyvinyl chloride (PVC), polymethylmethacrylate (PMMA), epichlorohydrin (ECO) plastic and mixtures thereof.

19. The process defined in claim 15, wherein the solvent is substantially immiscible with water.

20. The process defined in claim 15, wherein the solvent is selected from the group consisting of cyclohexane, chlorobenzene, hexane, benzene, toluene, pentane and mixtures thereof.